

## Claims

1. A handling device for the repositioning of parts  
10 comprising a pivot arm able to be driven by a drive means to  
perform an oscillating movement about a stationary first  
pivot axis, a handling part serving for carrying a gripper,  
which while performing a second pivot movement is able to be  
15 pivoted about a stationary second pivot axis and furthermore  
is able to be set radially in relation to the second pivot  
axis while performing a linear stroke, comprising a path  
setting cam extending at least partly around the first pivot  
axis, and having two linear terminal sections, the handling  
part being engaged with the path setting cam by means of a  
20 cam follower, the cam follower being able to be moved  
relatively to the pivot arm radially as regards its first  
pivot axis and the pivot arm so acts, during its first  
pivoting movement, in a driving manner on the cam follower  
that same is shifted along the path setting cam and  
25 accordingly the handling part moves, during each handling  
cycle, along a handling path, which has two linear terminal  
sections, in which the handling part respectively performs  
exclusively a linear stroke.



2. The handling device as set forth in claim 1, wherein the two linear terminal sections of the path setting cam extend at a right angle to one another.

5           3. The handling device as set forth in claim 1, wherein the longitudinal axes of the two linear terminal sections of the path setting cam meet at a common point on the second pivot axis.

10           4. The handling device as set forth in claim 1, wherein the pivot arm so engages an entrainment member arranged on the handling part for drivingly acting on the cam follower that the entrainment member is kinematically coupled with the pivot arm in the direction of the first pivotal movement  
15 while however being able to move radially in relation to the first pivot axis in relation to the first pivot axis.

            5. The handling device as set forth in claim 4, wherein the cam follower and the entrainment member lie in sequence  
20 on a common entrainment axis parallel to the first and the second pivot axis.

            6. The handling device as set forth in claim 1, comprising a loading means pivoting with the pivot arm and  
25 which takes effect between the pivot arm and the cam follower and biases the cam follower constantly against a flank of the path setting cam.

7. The handling device as set forth in claim 1, wherein



the handling part is a component of a pivotally moving handling arm, the handling arm additionally having a bearing part able to pivot to define the second pivot axis, on which bearing part the handling part is arranged in a linearly adjustable manner for the definition of the axis of the linear stroke movement.

8. The handling device as set forth in claim 7, wherein the path setting cam is of slotted design and the cam follower fits into the path setting cam, and to the side adjacent to at least one of the linear terminal sections of the path setting cam abutment means are provided, on which in the terminal position the bearing part rest laterally and the same is so designed that the cam follower is thrust against the flank on the other side of the path setting cam.

9. The handling device as set forth in claim 1, further comprising shock absorber means, which are associated with the two linear terminal sections of the path setting cam and cooperate with the handling part, when same moves into the respective terminal position as part of the linear stroke movement.

10. The handling device as set forth in claim 1, wherein the path setting cam extends between the first and the second pivot axis. the first pivot axis being located on the concave side of the curvature and the second pivot axis being located of the convex side of the curvature.



11. The handling device as set forth in claim 1,  
wherein the second pivot axis is placed as a linear  
extension of the linear terminal sections of the path  
setting cam, the linear terminal sections having their  
5 closed ends facing away from the second pivot axis.

12. The handling device as set forth in claim 1,  
wherein the first pivot axis is placed between the path  
setting cam and the second pivot axis.

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13. The handling device as set forth in claim 1,  
wherein the second pivot axis is placed as a linear  
extension of the linear terminal sections path setting cam  
the sections having their closed ends directed toward the  
15 second pivot axis.

14. The handling device as set forth in claim 12,  
wherein the first pivot axis is approximately surrounded by  
the path setting cam, the second pivot axis being attached  
20 in the open region between the two linear terminal sections  
of the path setting cam.

15. The handling device as set forth in claim 1,  
wherein the angle between the two linear terminal sections  
25 of the path setting cam may be varied.

16. The handling device as set forth in claim 1,  
wherein at least one and preferably at least each of the two  
linear terminal sections of the path setting cam is able to



be pivoted about a pivot center lying on the second path setting cam in relation to the respectively other linear terminal section and is able to be positioned in a different angular position.

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17. The handling device as set forth in claim 16, wherein the longitudinal axes of the two linear terminal sections of the path setting cam intersect with the second pivot axis irrespectively of the instantaneous angular position.

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18. The handling device as set forth in claim 16, wherein the pivoting terminal section of the path setting cam is located on a cam member which is pivotally arranged on a support member in relation to which the first and the second pivot axis are arranged in a stationary fashion, the pivot center being preferably arranged on the second pivot axis.

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19. The handling device as set forth in claim 18, wherein the two linear terminal sections of the path setting cam are provided on separate, cam members able to be set independently from each other in relation to the support body.

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20. The handling device as set forth in claim 18, comprising circularly arcuate guide means for pivotally bearing the respective cam member in relation to the support body.